

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 79-12

NPDES PERMIT NO. CA0038415

AMENDING ORDER NO. 76-23 REGARDING
CITY AND COUNTY OF SAN FRANCISCO
RICHMOND SUNSET SEWERAGE ZONE
WET WEATHER DIVERSION STRUCTURES

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter called the Board, finds that:

1. The City and County of San Francisco, hereinafter called the discharger, presently discharges untreated domestic and industrial wastewater mixed with storm water runoff, all containing pollutants, into the Pacific Ocean, a water of the United States, through any of eight (8) wet weather diversion structures in the Richmond Sunset Sewerage Zone. These discharges occur only when rainfall exceeds 0.02 inches per hour.
2. Order No. 76-23 required the discharger to reduce the frequency of discharge for diversion structures No. 1 through 8 to an average of one overflow event per year and to undertake a citywide overflow control study to better define the cost and water quality benefits of facilities designed to achieve various overflow frequencies.
3. The discharger has undertaken an overflow control study and has requested the Regional Board to consider an increase in the allowable frequency of discharge for diversion structures No. 1 through 8 from an average of 1 overflow per year to an average of 8 overflows per year.
4. The following table provides a comparison of improvement obtainable by reducing the average overflows from diversion structures No. 1 through 8 to eight (8), four (4) and one (1) overflow per year compared to the existing average of 114 per year. Data was derived from the discharger's predictive computer model and are therefore approximations.

Average Number of Overflows Per Year	Existing 114	8	4	Order No. 76-23 1
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Minimum/maximum number of overflows per year	26/193	1/18	0/11	0/4
% of annual combined wastewater treated (avg.)	74.1	95.9	98.1	99.53
% of annual combined wastewater which overflows (avg.)	25.9	4.1	1.9	0.47
Volume of overflow (Million gallons/year, avg.)	2870	449	213	52
Total hours of overflow per year (avg)	372	32	15.4	3.5
Minimum/maximum hours of overflow per year	163/617	2/78	0/42	0/18
Average duration of overflow (hours)	3.3	4	3.9	3.5
Composition of overflows (avg)				
% sewage	12	6.5	6.5	6.2
% storm water	88	93.5	93.5	93.8
% reduction in BOD ₅ and Suspended Solids discharged from existing overflows (avg)	base	84	92.5	98
Average number of days nearshore water adjacent to discharge points exceed coliform standards for body contact recreation				
days greater than 1000 MPN/100 ml	119	25	13	4
days greater than 10,000 MPN/100 ml	70	10	6	1
Cost of facilities (millions of dollars)				
Capital cost (total)	base	189	242	299
Storage		150	161	182
Pumping		13.5	21.5	25.5
Treatment/outfall		25.5	59.1	91.6
Annual cost	base	14	19	24

5. Overflows will occur from storage structures which will be designed to provide for additional removal of settleable and floatable solids. Removal of these solids will provide further mitigation of the aesthetic and public health impacts over and above the mitigation provided by reduction in the frequency of overflows.

6. The discharger completed a final EIR/EIS for the Wastewater Master Plan in May 1974. The discharger completed a final EIR for the Westside Transport facility in July, 1977, which addressed overflows from diversion structures Nos. 2 and 3. This EIR identified potential adverse water quality impacts from this project related to seismic activity and the project has been modified to mitigate this potential impact. This EIR will be amended by the City following adoption of this order. The discharger has commenced preparation of a draft EIR for the Richmond Tunnel facility which will address overflows from diversion structures Nos. 4 through 8 and has indicated they will prepare an EIR for the Lake Merced Transport facility which will address overflows from diversion structure No. 1. Upon completion of the amendment to the Westside Transport facility EIR, the final EIR for the Richmond Tunnel facility, and the final EIR for the Lake Merced Transport facility, the Board will review any adverse water quality impacts identified, and if necessary, make appropriate revisions of this Order. The issuance of waste discharge requirements for this project is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of the California Public Resources Code (CEQA) in accordance with Water Code Section 13389.
7. The Board has notified the discharger and interested agencies and persons of its intent to amend Order No. 76-23 and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
8. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.
9. The combined sewer collection system of San Francisco, designed to transport both sanitary and storm flows, presents a unique problem regarding total compliance with the Basin Plan prohibition against the discharge of untreated waste. The Basin Plan recommends that exceptions to compliance be allowed for wet weather discharges, provided that beneficial uses are not adversely affected; however, a specific exception clause was not included. It is clear that the intent of the Basin Plan is to allow exceptions and this Board will consider inclusion of a specific exception clause during the next Basin Plan updating.
10. Based upon the presently available planning information contained in these findings and evidence presented at the public meeting concerning the cost differences of facilities necessary to achieve specific overflow frequencies and the water quality benefits derived from construction of those facilities and considering the location and intensity of existing beneficial uses; a long term average of eight (8) overflows per year for diversion structures No. 1 through 8, will provide adequate overall protection of beneficial uses; provided however that further study to comply with the discharge prohibitions No. A.2 and A.3 is required by the discharger especially where existing discharge points are located in areas which do not have adequate exchange with ocean water and may not provide adequate protection of adjacent nearshore beneficial uses. Further mitigation may be required in the future, after facilities are placed in operation, if it is determined that beneficial uses are not adequately protected.

11. The Federal Water Pollution Control Act and amendments thereto require that point source discharges comply with appropriate standards by July 1, 1977. The discharger has not started construction of facilities to comply with the prohibitions and provisions of Order No. 76-23 as amended by this Order. The Board will consider an appropriate enforcement order which will include a time schedule for compliance with Order No. 76-23 as amended by this order within 90 days of the date of this order.

IT IS HEREBY ORDERED, that Order No. 76-23 is amended as follows:

A. Finding No. 1, page 1, is amended to read:

1. The City and County of San Francisco, hereinafter called the discharger, presently discharges untreated domestic and industrial wastewater mixed with storm water runoff, all containing pollutants, into the Pacific Ocean, a water of the United States.

B. Finding No. 8, page 2, is deleted.

C. Finding No. 9, page 2, is amended to read:

9. The beneficial uses of the Pacific Ocean in the vicinity of these diversion structures are:

Water contact recreation
Non-contact water recreation
Marine habitat
Commercial and sport fishing
Fish migration
Wildlife habitats

D. Discharge prohibition A.1, page 3, is amended to read:

1. Discharge of untreated waste to waters of the State is prohibited with the exception of allowable overflows as defined below. The City shall design and construct facilities for diversion structures No. 1-8 to achieve a long term average of eight (8) overflows per year from these facilities. These long term overflow frequencies shall not be used to determine compliance or noncompliance with the exception. Allowable overflows from these facilities are defined as those discharges which occur when all of the following criteria are met:
 - a. All storage capacity within a storage facility is fully utilized; and
 - b. Maximum installed pumping capacity or some lower rate based on limits of downstream transport or treatment capabilities is being utilized to withdraw flows from the storage facility; and

- c. All citywide treatment facilities, excluding the Golden Gate Park reclamation facility, are being operated at capacity or at some lower rate consistent with the maximum withdrawal and transport rates; and
- d. Overflow occurs from a facility employing baffles or other equivalent means to reduce the discharge of floatables.

Overflows which occur when criteria a, b, c, and d are not being met shall be considered violations of this discharge prohibitions.

- E. Provision B.3.a., page 3, is amended to delete the following:

"(1) 1/ Reduce frequency of discharge for diversion structures No. 1 through 8 to an average 2/ of one overflow event per year.

1/ This Board will consider amendment of this order to further reduce frequency of discharge after review of the information requested in Provision B.4. below.

2/ Method of computing average to be developed in self-monitoring program."

- F. Provision B.3.a is amended to add the following on page 5:

<u>Task</u>	<u>Completion Date</u>
"(d) Full compliance with Discharge Prohibition A.1.	by July 1, 1977"

- G. Provision B.3.b. is amended to add the following on page 5:

<u>Task</u>	<u>Completion Date</u>
"(3) Full compliance with Discharge Prohibition A.2. and A.3.	by July 1, 1977"

- H. Provision B.3.c. is amended to add the following on page 6:

<u>Task</u>	<u>Completion Date</u>
"(2) Full compliance with Provision B.1.	by July 1, 1977"

- I. Provisions No. B. 10., 11., and 12. are added on page 7 as follows:

"10. The City and County of San Francisco is required to submit to the Regional Board by the first day of every month a report, under penalty of perjury, on progress towards compliance with this Order. Said report shall include the status of progress made toward compliance with all tasks of this Order. If noncompliance or threatened noncompliance is reported the reasons for noncompliance and an estimated completion date shall be provided.

11. The long term average overflow frequency prescribed in this Order is based on information available at the time of adoption of this Order. If the Board finds that changes in the location, intensity or importance of affected beneficial uses or demonstrated unacceptable adverse impacts as a result of operation of the constructed facilities have occurred they may require the construction of additional facilities or modifications of the operation of existing facilities.
12. The City and County of San Francisco shall perform a self-monitoring program in accordance with the specifications prescribed by the Executive Officer of the Regional Board. The City and County's Health Department is requested to post warning signs on all beaches affected by the wet weather overflows for a period of time commencing with the day of overflow and continuing until the water analyses indicate the water quality of the affected areas have recovered and are meeting bacteriological standards for water contact sport recreations in the beach areas."

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on January 16, 1979.

FRED H. DIERKER
Executive Officer

Attachments:

Reporting Requirements 8/8/73
Standard Provisions 8/8/73